ABSTRACT OF THE DISCLOSURE

There are provided a bleeder resistance circuit which has an accurate voltage dividing ratio, a small temperature coefficient of a resistance value, and high precision, and a semiconductor device using such a bleeder resistance circuit, which has high precision and a small temperature coefficient, such as a voltage detector or a voltage regulator. In the bleeder resistance circuit using a thin film resistor, conductors located over and under the thin film resistor are made to have substantially the same potential as the thin film resistor. Further, when polysilicon is used for the thin film resistor, the film thickness of the polysilicon thin film resistor is thinned, and an impurity introduced into the polysilicon thin film resistor is made to be a P-type. Thus, a variation in a resistance value is suppressed, and a temperature dependency of the resistance value is made small.